



Research Brief

Pension Debate: The Myths and Realities of Defined Benefit and Defined Contribution Plans

January 2005

Moving from a Defined Benefit Plan to a Defined Contribution Plan Won't Help Current Budget Crisis

The change to a defined contribution (DC) plan would not save the State and local government money for at least 10 years, and in fact, it will add a second pension system that will add start up costs to government budgets. In addition, the State would also have to pay more money to cover disability and death benefits for these employees, as well as Social Security, which State safety personnel and others don't currently receive.

The CalPERS Defined Benefit Plan Works Very Well

CalPERS has been a proven great investor for the taxpayers of California. Over the last 10 years ended June 30, 2004, CalPERS returns averaged 9.7 percent even with two years of negative returns. It has generated positive investment returns 18 of the last 20 years, and costs less than a DC plan. Some 75 percent of income to fund pensions came from good investment earnings during the last 10 years.

CalPERS investment earnings have made up the lions share of the fund over the last 22 years. According to its pension consultant Wilshire Associates, wealth created through investments has totaled \$171.9 billion from 1982-2004. During the same period, employer and employee contributions totaled \$29.7 billion and the System paid out \$48.6 billion in retirement benefits.

A report compiled by Cost Effectiveness Measurement Inc. found that CalPERS investment staff added \$7 billion in excess returns over the five-year period ended December 31, 2003, while taking less risk than other public pension funds in the United States, Europe, Canada and Asia.

Excessive Benefits in the Defined Benefit Plan Is a Myth

Average pension is small. No one is getting rich on pensions. Some 25,000 CalPERS members retire each year. The average age at retirement for the largest segment of workers is 60, with 19.5 years of service, and a benefit allowance of \$1,673.82 a month. The average CHP employee retires at age 55, with 27.9 years of service, and receives an allowance of \$3,811.27 a month.

The majority of State cost increases are due to market downturn, not to increased benefits. Nearly 80 percent of increases in employer rates between 2002-04 are due to the two-year downturn in the economy. And as a percent of payroll, the State pays less per employee than it did 25 years ago for school employees, state miscellaneous employees, state industrial workers, state safety workers and state peace officer and firefighters.¹

Defined Contribution Plans Don't Cost Less, They Cost More

Dollar for dollar, DC plans cost more. Administrative costs of DC plans are higher – often much higher – than a DB plan.² The average cost of administering CalPERS defined benefit plan is 0.18 percent. The annual cost of a DC plan can rise to as much as 2 percent of assets. The expense ratio for a stock mutual fund is 1.1 percent of assets.

CalPERS investment portfolio is low cost and less risky than other public pension funds. A Cost Effectiveness Measurement Inc., found that CalPERS saved \$144 million compared to its peers, paying less for consulting, custodial and active management services. Costs to run the pension fund's investment portfolio were \$413.2 million in 2003, compared to a peer benchmark of \$557.1 million.

In a typical DB plan, 80 cents of each \$1 is spent on members who retire; in a DC plan 50 cents of each \$1 is spent on benefits with the other 50 cents spent prior to retirement. For retiring members to receive the same amount of benefits, contributions to the fund would need to increase substantially.³

There is no guarantee that tax dollars put into an employee account will be used for retirement. Research indicates that most employees who leave one job for another, cash out their accounts – including the monies contributed by the employer for the purpose of retirement -- rather than roll them over to the next employer's retirement plan.⁴ If DC proceeds fall short of basic retirement income needed, the State will end up paying more in public assistance when employees are old, ill and infirm.

A comparison of operation expenses favors DB plans. Employees pay big fees to mutual funds and other investment managers on their investment dollars in

DC plans. On average, mutual funds charge \$1.35 for “load” and/or administrative expenses for every \$100 invested. For each of the last 6 years, CalPERS spent less than two tenths of one percent of the fund’s value – 18 cents on every \$100 invested.⁵

The State will bear start-up costs of a DC plan, bringing to two the number of plans it will need to budget for. The State’s contributions to the CalPERS plan do not require direct payment of administrative costs to run the system. If the State were to set up a DC plan, it would have to pay for start-up costs. The DC plan does not cover costs of disability retirements and death benefits, which are embedded in the cost of the DB plan. The State would also have the added expense of starting to pay 6.7 percent of payroll for police, firefighters, and others in safety classes who don’t get social security under the existing DB plan.

The State throws away an opportunity to use future investment returns to cover retirement costs, relieving taxpayers from some of the burden of funding pensions. A DC plan does not give the State the ability to use investment returns to pay for a portion of pension costs. For example, investment returns and employee contributions generated enough income in the mid-1990s that the State did not pay any contributions during four years -- Fiscal year 1998-99 through Fiscal Year 2001-02 -- for 350,000 classified school workers. That represented a savings of over \$4 billion alone.

Over the last 10 years, 75 percent of the income to CalPERS has been from investments, not employer or employee contributions. Over the last decade, members’ contributions have actually exceeded the amount of employer contributions by \$1.1 million.

Replacing a Defined Benefit Plan with a Defined Contribution Model Turns Off The Future Spigot of Pension Dollars For Investments in the State Of California

Under the existing CalPERS defined benefit plan, more than \$19.5 billion in pension dollars is set aside for California investments. Replacing CalPERS with a DC plan would mean that future contributions needed for a DC plan could not be re-deployed for California investments. It would turn a blind eye to the opportunity to redeploy capital to strengthen California business, promote job growth, and build communities and infrastructure. These investments – a part of CalPERS diversified portfolio of investments -- help strengthen the State’s economy and tax base.

Currently, CalPERS invests more than \$10.7 billion in companies based in California – from blue chip corporations on the New York Stock Exchange to start-up firms in south central Los Angeles and the Silicon Valley.

CalPERS holds \$2.4 billion in fixed income assets, including corporate bonds in California, that enable corporate expansion. And CalPERS invests \$6.4 billion in California real estate. These include investments in industrial office properties, office buildings, senior housing and retail establishments. CalPERS is also one of the largest real estate developers, financing more than \$2 billion worth of single family homes.

CalPERS pension dollars have financed the building of more than 43,000 homes and developed 33,000 lots for single family homes. This public pension capital has provided \$13.8 billion in mortgages for nearly 100,000 California families.

The private equity portion of the CalPERS portfolio has invested in many start-up companies, including biotechnology which capitalizes on the advent and convergence of new technologies including genomes, bioinformatics and therapeutic agents.

During the recession of the late 1980s, CalPERS was among the only sources of construction capital in the State. After the terrorist attacks on September 11, 2001, CalPERS helped stabilize the New York Stock Exchange by continuing to invest into the stock market in spite of the market uncertainty.

Defined Contribution Plans Threaten Employee Retirement Security

DC Plans Make Future Uncertain. Tax dollars set aside for employees' use to finance their pension under a DC plan may never be used as is intended. That is because under a DC plan, participants will face daunting risks investing on their own. Some may not be able to resist cashing out retirement assets prematurely. These are uncertain factors on which to base a worker's retirement income security. And research suggests that DC plan participants generally earn rates of return on investment far below what DB plan funds typically earn.⁶

Even if employees in a DC plan do manage to earn the same rate of return as a DB plan fund and resist the urge to cash out prematurely, at the end of a full career they will likely receive a smaller benefit than similar employees in the DB plan. For example, an employee in a DB plan (with a benefit formula of 2% at age 60 and employer and employee contributions of 10% of pay) hired at age 30 with a starting salary of \$25,000 and 5% pay increases each year will have a retirement benefit with a present value of \$732,100 upon retirement at age 60.

In contrast, the retirement benefit for an employee in a DC plan hired at the same age with the same salary (assuming that the DB plan and DC plan both earn a rate of return of 8%) will have a present value of \$497,529 upon retirement at age 60.⁷

Employees could outlive their retirement assets in a DC plan. DC plans do not take into account the risk that the employee will outlive their retirement assets. If public servants didn't earn enough through their DC plan, the question will become who will help them when their retirement nest egg runs out? Will the State's safety net – currently stretched to its limits – be responsible?

DC plans do not include inflation protection, disability benefits or death benefits. For retirees in a DC plan, an annual inflation rate of 2.5 percent from age 65 to 93 would cut purchasing power in half. Employees would be without either disability or death benefits in a DC plan. This is an inequitable arrangement when workers with the DB plan work along side of them. (Disability & death benefits are already factored into a DB plan.)

When offered a DC plan, some employees don't even contribute and most contribute less than the maximum amount allowed. 26 percent of employees who are eligible for 401(k) plans do not participate. Non participation is concentrated in lower-income employees. Among all employees, less than 10 percent contribute the maximum allowable amount, which further restricts their ability to match DB payout amounts.⁸

Chances that the DC plan would not provide an adequate benefit are high. Research suggests employees do not invest well on their own to ensure an adequate benefit through their later years. An annual study conducted by Dalbar, a Boston fund consulting firm, found that the average stock fund investor had a 5 percent annual gain from 1984 to 2000; compared to a 16 percent annual average gain for the Standard & Poors (S&P) 500 stock index for that period.⁹ Over the last 10 years ending June 30, 2004 CalPERS returns averaged 9.7 percent.

A John Hancock Financial Services Retirement Survey of defined contribution participants published in May 2002 showed that “many have a cockeyed view of how investments work across the board.” John Hancock researchers said that most defined contribution participants will fall well shy of the estimated 75 percent of pre-retirement income needed to maintain the same lifestyle in retirement.¹⁰

One half of DC plan investors do not diversify, almost none rebalance portfolios periodically.¹¹

Defined benefit plans outperform 401(k)'s in a down market.

According to a 2004 analysis by Watson Wyatt Worldwide, defined benefit plan returns tend to do better than those of 401(k) plans during bad market years that follow periods of hot stock market returns. Watson Wyatt Worldwide analyzed

2000 and 2001 Form 5500 data for companies that sponsor both defined benefit and defined contribution plans.

Previous studies by Watson Wyatt showed that from 1995 to 1998, defined benefit plan returns beat those of 401(k) plans. Once the market turned sharply downward in March 2000, defined benefit plan returns began to dominate again, with Watson Wyatt researchers theorizing that better downside protection came from the higher portfolio diversification of the professionally managed defined benefit plans.¹²

Defined Contribution Plans Will Hamper Recruitment and Retention and Make State Attract Less Capable, Not More Capable Work Force

DB benefits help recruit for classifications when the State experiences a labor shortage. The State competes with the public sector for many specialized workers – especially safety employees. The State has and will continue to have challenges recruiting scientists, researchers, technology workers, nurses, doctors, accountants and other specialized workers. (This occurred when the State had mandatory tier 2 programs in the early 1990s.) Human Resource specialists indicate that it is not the pay that attracts people to work for the State, but rather the retirement benefits. State workers have not kept pace in pay – most of whom went without annual pay raises for many of the last 13 years.¹³

DB plans promote longevity which gives good return on the investment in training specialized workers such as firefighters and safety personnel. In contrast, under a DC plan, employee turnover may be higher, causing the State and local government to waste taxpayer dollars training a revolving door of workers.

DC plans would encourage older, more expensive workers to continue working longer, rather than retire. The performance of the markets would have a significant influence on when people retire. When the economy is doing poorly and individuals' DC accounts are down, they may decide to work beyond a reasonable retirement date, creating less opportunity to replenish the workforce with younger workers.¹⁴

People who retire with a defined contribution plan end up retiring later than earlier. The expected retirement age of a DB plan is 63.9 nationwide; the expected retirement age of a DC plan participant is 65.1 years.¹⁵

Market timing would determine when people retire. Retirement trends, not age periods of market growth would spawn large numbers of employees retiring. Down markets would restrict the number of workers retiring.

***Contrary to Popular Belief,
DC Plans Get Thumbs Down From Large Employers***

The decrease in DB plans has been limited nearly exclusively to small, not large employers. Companies that are electing to discontinue DB coverage have been small employers, not large employers, and they are doing so because of the expense of complying with complex federal regulations, most of which do not apply to the public sector.¹⁶

Large employers have generally kept their DB plans rather than convert to DC plans.

- **Most of the decrease in DB plans has occurred among small and medium size employers** (employers with less than 1000 employees).¹⁷
- **Eighty percent of professional service firms offer DB plans, with the average contribution rate from companies with over 1,000 employees sitting at \$40 million in 2003.**¹⁸
- **Due to their size, public employers are more comparable to large private-sector employers, most of which offer DB plans.** In 2003, 68% of large private-sector employers offered DB plans compared to 45% of all private sector employers.¹⁹
- **Although DB plans are more prevalent in the public sector, it is likely that more private sector employers would adopt or continue DB plans were it not for the cost and administrative burden imposed by ERISA laws and regulations.** Because public pension plans are exempt from most of ERISA, DB plans are even more advantageous for public employers than for private employers.²⁰
- Large and medium private companies value DB plans as primary recruitment and retention tool (American Benefits Council).
- Examples of large companies with DB plans:
 - Chevron
 - Unocal
 - Lockheed Martin
 - Boeing
 - Albertson's
 - Boise Cascade
 - Louisiana Pacific
 - Safeco
 - Weyerhaeuser

Only 17 percent of Fortune 100 companies have a DC plan as their primary benefit, according to Watson Wyatt. Most large employers continue to offer defined benefit plans as their primary retirement program and its use among large employers with 10,000 or more employees is increasing. The highly regarded Employee Benefits Research Institute (EBRI) found that since 1985, there was an actual increase in the number of large employers that offered a defined benefit plan as their primary retirement plan. This occurred during a period of many corporate mergers of large firms, who had a unique opportunity to select one or the other.²¹

The majority of U.S. companies with 1,000 or more employees that offer a DB plan believe their plan directly impacts employee retention. According to a September 2004 study by Diversified Investment Advisors.²²

Public Sector Experience with DC Conversions Has Not Been Highly Successful

Since 1997, large numbers of public employers have been given an opportunity to participate in a DC plan as their primary retirement benefit. In Florida and Michigan, an overwhelming majority – more than 90 percent of those eligible to switch to a DC plan – elected to stay with the DB plan.²³

The state of Nebraska recently converted back to a DB plan from a DC plan. A study showed that over 20 years, the typical worker posted an average annual return of 6 to 7 percent. (Money managers running the state's old-fashioned defined benefit plan ran 11 percent average returns.) Even though the state made much effort to help individuals invest wisely, half of all employees stayed in the default fund, even though they had 11 choices. Nebraska retirement system officials were concerned that the state was wasting taxpayer money via matching contributions to workers accounts.²⁴

In Florida, where employees could leave the DB plan for the DC plan, most opted to stay in the DB plan.

When the Illinois Municipal Retirement Fund looked into switching from a DB to DC plan, it found that its total cost – administrative and investment expenses – could rise from 0.44 percent of assets to as much as 2.25 percent of assets, a difference that approached \$315 million a year.²⁵

The Value of “Defined Contribution Portability” Is Not What It’s Cracked Up To Be

The conventional wisdom is wrong that workers today are more mobile and want more portability of their retirement benefits.

- **Workers are not necessarily more mobile.** From 1983 to 2000, median job tenure increased or stayed the same for all workers in the U.S. with

the exception of workers in two sectors (manufacturing and transportation/public utilities).²⁶

- **Public-sector workers are even less mobile.** From 1983 to 2000, the median tenure for government workers in the U.S. increased from 5.8 years to 7.2 years. In 2000, the median years of tenure for government workers (7.2 years) was more than twice that for workers in the private sector (3.2 years).²⁷
- **DC plans are not necessarily the solution to deal with the issue of pension portability.** A significant proportion of workers with DC plans “cash out” their accounts when they change employers rather than leave it in the account or roll it over to their new employer’s plan. For example, a study conducted by the human resources consulting firm Hewitt Associates found that 57% of employees who leave their companies choose cash payments from their retirement savings plans instead of rolling over the balances to their new employer’s plans or into individual accounts.²⁸
- **DB plans have been adopting changes to make benefits more portable** (e.g., shorter vesting periods and expanded reciprocity).
- **In cases where public employees have the option of participating in an alternative DC retirement plan, it appears that most opt for the DB plan.** During the first two years of Florida’s optional retirement program, only 3.4% of eligible employees opted for the DC alternative (8% of new hires).²⁹ In Michigan, state employees hired prior to March 31, 1997 had the option to remain in a DB plan or switch to a DC plan that was mandatory for all new employees. Only 6% of eligible employees switched to the DC plan.³⁰

DC plan would hurt “portability” via reciprocity with public agencies within CalPERS. One of the recruitment features of the CalPERS DB plan is that there is reciprocity with other public agencies in the State; these employees would not have the same reciprocity benefit as others who work for the State.

Employees taking money out of CalPERS when they leave State service will drain the fund. The Sacramento Bee in a 1996 editorial pointed that “Every worker intending to leave public service short of vesting for a pension – political appointees, highly paid managers, and professionals who have private sector skills – would likely choose the new option, draining funds from the system. That would leave taxpayers with the same pension obligations but less money to fulfill them.”

Moving to a DC Plan Helps and Hurts the Wrong People

Higher costs and fees are charged for DC plans. Wall Street money managers will make money on these assets even if investors lose. Many people would

rather have investment managers within public service manage the assets rather than mutual funds whose goal is to make profits for itself. DC plans prevent participation in the full range of investments such as real estate and private equity investments.

¹ "Employer Contribution Rate History - CalPERS State and Schools Actuarial Valuation, June 30, 2003.

² "Myths and Misperceptions of Defined Benefit and Defined Contribution Plans." A NASRA White Paper. December 2003.

³ National Conference on Public Employee Retirement Systems White Paper on Defined Benefit and Defined Contribution Plan, 1997

⁴ "Myths and Misperceptions of Defined Benefit and Defined Contribution Plans." A NASRA White Paper. December 2003.

⁵ Cost Effectiveness Measurement, Inc. Benefit Administration Benchmarking Analysis. May 2003.

⁶ Ian McDonald, "Fundholder's Lament: All Bear, No Bull," Wall Street Journal, April, 25, 2002. And "Benefit Review Study of the Nebraska Retirement Systems." August 2000. Buck Consultants.

⁷ "The Search for Cheaper Benefits: Defined Benefit versus Defined Contribution," Public Pension Professionals, article viewed at http://www.pensioncube.com/Stories/DBvDC1_1.htm. Feb. 2004

⁸ Munnell and Sunden, *Coming Up Short*, p.150

⁹ Ian McDonald, "Fundholder's Lament: All Bear, No Bull," Wall Street Journal, April 25, 2002.

¹⁰ "Myths and Misperceptions of Defined Benefit and Defined Contribution Plans." A NASRA White Paper. December 2003.

¹¹ Munnell and Sunden, *Coming Up Short*, p.11

¹² "Diversification is Key: Defined benefit plans outperform 401(k)s in a down market," Pension & Investments November 29, 2004.

¹³ Legislative Analyst Office 2000-01 Analysis.

¹⁴ Kosiba, Louis W., Illinois Municipal Retirement Fund General Counsel. "The Defined Benefit vs. Defined Contribution Debate: The \$250 Million Question." October 13, 1999.

¹⁵ "Myths and Misperceptions of Defined Benefit and Defined Contribution Plans." A NASRA White Paper. December 2003.

¹⁶ "How Has the Shift to 401K's Affected Retirement Age?" by Alicia H. Munnell, et. A., Center for Retirement Research, Boston College.

¹⁷ W. Michael Carter, Actuary. February 6, 1998. Letter to comment on "Pension Liberation: A Proactive Solution for the Nation's Public Pension Systems" (a report by the American Legislative Exchange Council). Published on the National Council on Teacher Retirement website www.nctr.org/content/indexpg/carter.htm. And, Kosiba, Louis W., Illinois Municipal Retirement Fund General Counsel. "The Defined Benefit vs. Defined Contribution Debate: The \$250 Million Question." October 13, 1999.

¹⁸ Results of a survey by Diversified Investment Advisors. "PLANSPONSOR.com" December 2, 2004

¹⁹ Hewitt Associates Newsletter, Jan. 6, 2004.

²⁰ "Myths and Misperceptions of Defined Benefit and Defined Contribution Plans." A NASRA White Paper. December 2003.

²¹ "Myths and Misperceptions of Defined Benefit and Defined Contribution Plans." A NASRA White Paper. December 2003.

²² Business Wire, September 7, 2004 "Majority of U.S. Companies That Offer a Pension Plan Say It Impacts Employee Retention, New Survey Shows"

²³ "Pension fund slowly gaining popularity." Tallahassee Democrat, Jan. 12, 2004. And Cypen and Cypen Newsletter. December, 1998. www.cypen.com/pubs/1998dec.htm

²⁴ "Nebraska Sees Red Over its 401(k) Plans." K.C. Swanson. The Street.com. May 7, 2002. <http://www.thestreet.com/funds/belowradar/10021041.html>

²⁵ Louis W. Kosiba, "The Defined Benefit vs. Defined Contribution Debate: The \$250 Million Question," Illinois Municipal Retirement Fund, October 13, 1999, as cited in Munnell and Sunden, *Coming Up Short*.

²⁶ "Employee Tenure in 2000." Bureau of Labor Statistics News Release, August 29, 2000. <http://stats.bls.gov/newsrels.htm>, p. 11.

²⁷ "Employee Tenure in 2000." Bureau of Labor Statistics News Release, August 29, 2000. <http://stats.bls.gov/newsrels.htm>, p. 11.

²⁸ From *Business Insurance* Sept. 22, 1999 cited in "Are Your Retirement Benefits Important to You?" Oklahoma Public Employees Association News, April 10, 2003. <http://www.opea.org/News/OPEA/opea-20030410e.htm>

²⁹ "Pension fund slowly gaining popularity." Tallahassee Democrat, Jan. 12, 2004.

³⁰ Cypen and Cypen Newsletter. December 1998. www.cypen.com/pubs/1998dec.htm